Abstract

Title: Vertical jump comparison of women´s volleyball players

Objectives: The aim of this work was to coparison of vertical jump, postural stability and body composition of women´s volleyball players before and after season 2012/2013. During the season there was a deliberate intervention to develop explosive power. By the comparing the input and output of results we conclude that the training developed or didn´t develop explosive power of the lower limbs, and that had an effect on body composition and stability.

Methods: The study included 10 women from 2. Volleyball League (n=10 , age = ± 20,6 years, height = ± 172,7 cm, BMI = ± 0,19 kg/cm^2). For input and output testing, we used three different tests. First, we measured body composition, then postural stability (1) narrow standing with eyes open (the US-OO), (2) narrow standing with eyes closed (the US-ZO), (3) standing on the right lower limb "flamingo test "(the FLA-R), (4) stands on the left lower limb (the FLA-L). Finally, the players performed six types of vertical jump. Jump with the upper limbs (V1 - Countermovement jump free arms) jump without the help of the upper limbs (V2 - Countermovement jump), jump from squatting (V3 - Squat jump), when the whole movement only made up, without countermovement, block jump (V4 - Block), moving one step aside on the block and jump from the left side (V5 - Block-L) and move one step aside on the block and jump from the right side (V6 - Block-P).

Results: The results showed that deliberate interventions and training, it is possible to achieve an improvement in explosive strength of legs without changes in postural stability and body composition.

Keywords: volleyball, vertical jump, explosive power, stability